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(without alignments)
4996.727 Million cell updates/sec
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GenCore version 4.5
Copyright (c) 1993 - 2000 Compugen Ltd.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1736436 seqs, 858457221 residues
                                                                                                                                                                                                                                                                                                                                                                                  US-09-645-593-8_COPY_1_2040
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Listing first 45 summaries
                                                                                                                                                    OM nucleic - nucleic search, using sw model
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Gapop 10.0 , Gapext 1.0
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

	Description	Flax legumin-like	Flax 18.6 kDa oleo	Human immune syste	Chemically pretrea	Human immune syste	DNA sequence encod	50 kD subunit of S	Human immune syste	Human immune syste
SUMMARIES	ID	1			2 AAS45349					4 ABL33712
	DB	22	22	24	22		21	13	24	24
	% Query Match Length DB ID				17421	-				
	% Query Match	100.0	3.0	2.5	2.5	2.5	2.4	2.4	2.4	2.4
	Score	2040	61	51.8	51.2	51	48.6	48.6	48.2	48.2
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repeat_unit

c	10	48			24	ABL34154	Human immune syste
C	11	. 4			24	Ò	Human metastasis a
O	12	47.4		13202	24	ABL33485	Human immune syste
U	13				24	5	Human immune syste
	14	~			13	3	Peroxidase isozyme
	15	7		532	21	AA298840	Horseradish peroxi
ပ	16	~		1911	24	ABL34257	Human immune syste
ပ	17	7		5987	24	ABL33563	syst
U	18	47.2	2.3	15416	24	ABL34231	Ψ
υ	19	7		4 }	24	AAS61453	Human gene regulat
	20	47		3231	24	ABL34288	Human immune syste
	21	9		7498	24	ABL32257	immune
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ပ	23	46.6		3991	22	AAD16633	ப
	24	9		7346	24	ABL32345	
Q	25	9		7746	24	ABL33856	
O	26	9		16287	24	ABL32673	
	27	S		5962	24	ABL33469	syst
O	28	ഗ		7498	24	ABL32257	Human immune syste
O	29	ഗ		8991	24	AAS61295	Human gene regulat
	30	45.4		1431	21	AAZ37079	DNA sequence encod
υ	31	S		14649	22	AAS45414	Chemically pretrea
O	32	45.2		5378	24	ABL33878	Human immune syste
	33	4		5430	22	AAS46292	r suppre
U	34	44.6		6249	24	ABL33215	immune
υ	35	-4		6317	24	ABL32408	
O	36	4		6685	24	ABL32907	Human immune syste
υ	37	4		8873	24	AAS61125	Human gene regulat
O	38	44.6	•		24	ABL34230	Human immune syste
O	39	4		15416	24	AAS61452	Human gene regulat
	40	ব্য			22	AAS46748	
	41	4		9510	22	AAS46438	Tumour suppressor
	42	4	•	9510	24	ABL34563	Human metastasis a
υ	43	44.2			24	ABL34167	Human immune syste
O	44	44	•	12601	24	ABL34206	Human immune syste
υ	45	44	•		22	4	Tumour suppressor
						ALIGNMENTS	
RES	RESULT						

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Flax; seed-specific promoter; legume-like storage protein; seed oil; protein expression; anticoagulant; cytokine; growth factor; pectinase; interleukin; alpha-l-antitrypsin; anti-obesity protein; haemoglobin; serum albumin; insulin; lactoferrin; myoglobin; pulmonary surfactant; vaccine; alpha amylase; linin; ds.
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                                                                                Flax legumin-like seed storage protein DNA.
                                                                                                                                                                                                      Location/Qualifiers
           ВР
         AAD03030 standard; DNA; 4999
                                                         (first entry)
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AAD03030
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/note= "R2 direct repeat"
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1367..1378
                                                                                                         direct repeat"
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/label= Legumin_box
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2036..3779
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1223..1230
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                       misc_feature
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The present sequence is a DNA encoding flax legumin-like seed
storage protein (also referred as linin) fragments #1, #2, #3 and #4.

The present invention relates to a method for expressing non-native genes
in flax seeds. The method comprises introducing a chimeric nucleic acid
construct containing a seed-specific promoter obtained from flax and a
nucleic acid which is non-native to the promoter, into a flax plant cell
and growing the plant cell into a mature flax plant capable of setting
seed, where the nucleic acid is expressed in the seed under the control
of the promoter. The seed-specific promoters obtained from flax are
useful for modifying the protein, oll or polysaccharide composition of
the flax seeds and seeds of other plant species. The promoters facilitate
expression of proteins, including sulphur-rich protein that are found in
lupins or Brazil nuts in a seed deficient in sulphurous amino acids,
coppidaes having pharmaceutical value such as anticoagulants, antibodies,
vaccines, cytokines, growth factors, interleukins, mammalian proteins,
including alpha-1-antitrypsin, anticobesity proteins, haemoglobin, blood
proteins, human serum albumin, insulin, lactoferrin, mayolalucosidaes,
carabinase, amyloglucosidaes, catalase, celloblohydrolase, pectinases,
                                                                                                                                                                                                         Expressing non-native genes in flax seeds and seeds of other plant species for altering the seed oil and protein composition in the seeds, comprises using seed-specific promoters obtained from flax -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      12] ctagtcttgtgaccatccttcctcctgctctagttgagaggccttgggactaacgagagg 180
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                                                                                                                                                                    P-PSDB; AAY72902, AAY72903, AAY72904, AAY72905, AAY72907
                                                                                                        Van Rooijen G, Moloney MM, Singh S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
                                       (SEMB-) SEMBIOSYS GENETICS INC.
(CSIR ) COMMONWEALTH SCI & IND RES ORG.
                                                                                                                                                                                                                                                                                                   Claim 14; Fig 4; 68pp; English.
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30-MAY-2000; 2000CA-2310304.
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Flax; seed-specific promoter; oleosin protein; seed oil; vaccine; protein expression; anticoagulant; cytokine; growth factor; pectinase; interleukin; alpha-1-antitrypsin; anti-obesity protein; haemoglobin; serum albumin; insulin; lactoferrin; myoglobin; pulmonary surfactant; alpha amylase; ds.
                                                                                1621 tgtatgtctccctctaaataaacttggtattgtgtttacagaacctataatcaaataat 1680
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/note= "R2 direct
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/rpt_type= DIRECT /note= "R3 direct repeat" 1281..1290

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repeat_unit

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Best Local Similarity

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The present sequence is a DNA encoding flax 18.6 kDa oleosin protein.
The present invention relates to a method for expressing non-native genes in flax seeds. The method comprises introducing a chimeric nucleic acid construct containing a seed-specific promoter obtained from flax and a nucleic acid which is non-native to the promoter, into a flax plant cell and growing the plant cell into a mature flax plant capable of setting caed, where the nucleic acid is expressed in the seed under the control of the promoter. The seed'specific promoters obtained from flax are useful for modifying the protein, oil or polysaccharide composition of the promoter and proteins, including sulphur-rich protein that are found in lupins or Brazil nuts in a seed deficient in sulphurous amino acids, peptides having pharmaceutical value such as anticoagulants, antibodies, vaccines, cytokines, growth factors, interleukins, mammalian proteins, including alpha-l-antitrypsin, anti-obesity proteins, haemoglobin, pulmonary surfactants and proteins of industrial value such as alpha-amylase, arabinase, amyloglucosidase, catalase, cellobiohydrolase, pectinases,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Expressing non-native genes in flax seeds and seeds of other plant species for altering the seed oil and protein composition in the seeds, comprises using seed-specific promoters obtained from flax -
                                                                                                                                                                                                                                                                                                                                                         /product= "Flax 18.6kDa oleosin protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 3501 BP; 1007 A; 777 C; 781 G; 936 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Van Rooijen G, Moloney MM, Singh S;
'note= "R4 direct repeat"
                                                                                                                                                                   DIRECT
direct repeat"
                                                                                                                                                                                                                                              direct repeat"
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                                                          "R2 direct repeat"
                                                                                                                        "R1 direct repeat"
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                                                                                                         DIRECT
                                              /rpt_type= DIRECT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (SEMB-) SEMBIOSYS GENETICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               27-AUG-1999; 99US-0151044.
27-OCT-1999; 99US-0161722.
30-MAY-2000; 2000CA-2310304.
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'note= "R4
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/note= "R5
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/note= "R5
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1853..2395
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                                                                                                                                       .1486
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               1342..1351
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P-PSDB; AAY72900.
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3.0%; Score 61; DB 22; Length 3501;

Query Match

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652 tegtatgatacgaageagtegatgaagttteetaatgtgegagetaeaggeteegeaaag 711
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                                                                                                             523 tectagagaaaagggaagtegatetetgagtattgaaategaagtgeaeatttttttea 582
                                                                                                                                                                                            414 teccatagtetegacaetteaceatatggatgtttaaaacgtatateacgagtgegatet 473
                                                                                                                                                                                                                                                                                583 acgigiccaaiccacaaacaaagcagaagaagacaggiaaictiicaiactiataciga 642
                                                                                                                                                                                                                                                                                                                                                           474 acatgtoccatcacaccacatataaagcaatagtttgggagcttttcatatttgaaacgg 533
                                                                                                                                                                                                                                                                                                                                                                                                                                              643 caagtaataglettacegteatgealaataaegtetegtteetteaagaggggttlteeg 702
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           592 gcatccattcgggctcagaagcacatcaaagggatctctccatcgtagtattgggtcgtg 651
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   763 tcatggcctttataggtgtcagccgagctcgccaattcccgtccgactggctccgcaaaa 822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                712 aacccgcgaggtagatcgtatgctagtacccaaaaatcagtttgtcgtagcggaatcaac 771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Nucleic acid comprising fragment of chemically modified gene, useful for diagnosis and treatment of diseases associated with abnormal cytosine methylation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            antiarteriosclerotic; antianaemic; cytostatic; nootropic; neuroprotective; anti-HIV; anticonvulsant; ophthalmological; antirheumatic; antiarthritic; antidiabetic; antipsoriatic; antiinflammatory; cancer; antiinflammatory; cancer; actiemics disease; arteriosclerosis; anaemia; acute myeloid leukaemia; Alzheimer's disease; AIDS; epilepsy; neurofibromatosis; rheumatoid arthritis; psoriasis; bowel disease;
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                                   Indels
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49.1%; Pred. No. 2.5e-05;
tive 0; Mismatches 195;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABL34155 standard; DNA; 15548 BP
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01-SEP-2000; 2000DE-1043826.
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                                       190; Conservative
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                                                    Matches
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       The present invention provides a number of human immune system associated genes which are modified by the methylation of cytosines. The sequences can be used in the diagnosis and treatment of immune system disorders,
                                                                                                                                                                                                                                                                                                                            Chemically pretreated complementary DNA associated with cell cycle #27.
                                                        including eye diseases such as retinopathy, neovascular glaucoma and macular degeneration, arteriosclerosis, anaemia, cancer, acute myeloid leukaemia, Alzheimer's disease, AlDS, epilepsy, neurofibromatosis, rheumatoid arthritis, psoriasis and inflammatory/ulcerative bowel diseases. The present sequence is a gene of the invention,
                                                                                                                                                                                                                                                                                                                                                              1547 aatttaacttttagactttatatagttttaataactaagtttaaccactctattattt 1606
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Cell cycle; human; CpG dinucleotide; cytosine methylation; HIV; aging;
                                                                                                                                                                                                                                                                                            1487 tacatototttaagaaataatgtaacccotttagactttatatatatttgcaattaaaaaaat 1546
                                                                                                                                                                                                                                                        0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Designing primers and probes for analysing diseases associated with cytosine methylation state e.g. arthritis, cancer, aging,
                                                                                                                                                                                                                        DB 24; Length 15548;
                                                                                                                                                                 Sequence 15548 BP; 4209 A; 247 C; 2903 G; 8189 T; 0 other;
                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                          0.011;
                                                                                                                                                                                                                    Score 51.8; Di
Pred. No. 0.01:
0; Mismatches
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06-APR-2000; 2000DE-1019058.
07-APR-2000; 2000DE-1019173.
30-JUN-2000; 2000DE-1032529.
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                                                                                                                                                                                                                                                          107; Conservative
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                                                                                                                                                                                                                                       Local Similarity
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                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                            Matches
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Sequences AAS45296-AAS4550 represent chemically pretreated genomic DNA molecules associated with the cell cycle and specific PCR primers of the invention. The sequences are useful for detecting the methylation state of all CpG dinucleotides in a sequence and therefore for analysing associated diseases. By analysing evicosine methylations in the pretreated DNA, genetic and/or epigenetic parameters for the diagnosis and therapy of existing diseases or the predisposition to specific diseases can be ascertained. The parameters may be compared to another set of genetic and/or epigenetic parameters, the differences serving as basis for diagnosis and/or prognosis events which are disadvantageous to patients. The sequences of the invention are useful for the diagnosis and therapy of HIV infection, neurodegenerative disorders, graft-versus-host disease, aging, glomerular disease, lewy body disease, arthritis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1675 aataatcaatactcaactgaagtttgtgcagttaattgaagggattaacggccaaaaigc 1734
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             neurofibromatosis; rheumatoid arthritis; psoriasis; bowel disease;
arteriosclerosis comprising fragments of chemically modified genes
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity 49.1%; Pred. No. 0.016;
nes 163; Conservative 0; Mismatches 168; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       arteriosclerosis, solid tumours and cancers.
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                                                                                                                              Claim 1; SEQ ID No 54; 28pp; English.
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                                                 associated with cell cycle
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AAQ24134 standard; DNA; 1671
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hes 96; Conservative
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                                                                                                                                                           Saccharomyces cerevisiae.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention provides a number of human immune system associated genes which are modified by the methylation of cytosines. The sequences can be used in the diagnosis and treatment of immune system disorders, including eye diseases such as retinopathy, neovascular glaucoma and macular degeneration, arteriosclerosis, anaemia, cancer, acute myeloid thenkaemia, Alzheimer's disease, AnDS, epilepsy, neurofibromatosis, rheumatoid arthritis, psoriasis and inflammatory/ulcerative bowel diseases. The present sequence is a gene of the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                        Nucleic acid comprising fragment of chemically modified gene, useful for diagnosis and treatment of diseases associated with abnormal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1; Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 40862 BP; 14301 A; 414 C; 7426 G; 18721 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 1; SEQ ID NO 2046; 32pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                   Berlin K;
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                                                                                                       02-JUL-2001; 2001WO-EP07537.
                                                                                                                                                           30-JUN-2000; 2000DE-1032529.
01-SEP-2000; 2000DE-1043826.
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                                                                                                                                                                                                                                                                                                Piepenbrock C,
                                                                                                                                                                                                                                            (EPIG-) EPIGENOMICS AG
                                                                                                                                                                                                                                                                                                                                                                                                                                                               cytosine methylation
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WO200200928-A2.
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The present sequence encodes a yeast SceI endonuclease. The endonuclease hydrolyses the phosphodiester bond of a polynucleotide chain. The endonuclease is the 50 kpa subunit of a yeast endonuclease. The endonuclease gene was modified so that it could be mass-produced in an expression system such as E. coli or yeast. The endonuclease polynucleotide sequence was modified by substituting codons that are unique to mitochondia (the gene is expressed in mitochondria) with universal codons. The endonuclease cuts molecules within sequence AAZ37078, and is therefore useful in genetic engineering
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1283 ttaaatcatataattgaaataatagagtatttggtttagtattatctgaatatatcaata 1342
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New modified endonuclease capable of recognizing specific nucleotide sequence, useful for genetic engineering techniques \dot{}
                                                                               Scel endonuclease; phosphodiester bond; yeast; genetic engineering;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1635 ctaaataaacttggtattgtgtttacagaacctataatcaaataatcaastactca 1689
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Live 0; Mismatches 79; Indels 0;
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                                                                                                                            PCR; polymerase chain reaction; gene cloning; ss.
DNA sequence encoding a yeast SceI endonuclease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note= "contains 5 stop codons"
                                                                                                                                                                                                                                                                                                                                                                                                               "Scel endonuclease"
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                                                                                                                                                                                                                                                                                       Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The sequence given encodes the 50kD subunit of endonuclease SceI. Endonuclease SceI can be mass produced from the 50kD subunits sexpressed from the ENS2 gene. The 50kD subunit was purified by tracting SceI from eg. Sacchromyces IAM4274, and by denaturing the protein and subjecting it to PAGE, or by chromatography on a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1635 ctaaataaacttggtattgtgtttacagaacctataatcaaataatcaatactca 1689
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4.9%; Pred. No. 0.028;
ve 0; Mismatches 79; Indels 0;
                                     Endonuclease Scel; PAGE; chromatography; ENS2 gene; ss.
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                                                                                                                        /label= Scel_50kD_subunit
                                                                                      Location/Qualifiers
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82..158
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159..1586
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                                                               Sacchromyces cerevisae.
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             50 kD subunit of Scel.
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The present invention provides a number of human immune system associated denses which are modified by the methylation of cytosines. The sequences can be used in the diagnosis and treatment of immune system disorders, including eye diseases such as retinopathy, necvascular glaucoma and macular degeneration, arteriosclerosis, anaemia, cancer, acute myeloid rebuxaemia, Alzheimer's disease, AlloS, epilepsy, neurofibromatosis, rheumatoid arthritis, psoriasis and inflammatory/ulcerative bowel diseases. The present sequence is a gene of the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1197 AATTTAATATTATAAAACATTATAACAATCAATTTAAATTAACTTAAACTAACTAACTAAA 1138
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                                                                                                          antiarteriosclerotic; antianaemic; cytostatic; nootropic; neuroprotective; anti-HIV; anticonvulsant; ophthalmological; antirheumatic; antiarthritic; antidabetic; antipsoriatic; antiinflammatory; cancer; adisease; arteriosclerosis; anaemia; acute myeloid leukaemia; Alzheimer's disease; AIDS: epilepsy; neurofibromatosis; rheumatoid arthritis; psoriasis; bowel disease;
                                                                                Human; immune system disease; cytosine methylation; antiasthmatic;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 1; SEQ ID NO 1705; 32pp + Sequence Listing; German.
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Human immune system associated gene SEQ ID NO: 1705
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                                                                                                                                                                                                                                                                                                                                                                         dene; ds.
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957 ICTCATACCTAAACCTCCCGAATAACTAAAATTACAAATATACACCACTATACCTAACTA 898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; immune system disease; cytosine methylation; antiasthmatic; antianaemic; cytositatic; nootropic; nontanaemic; cytositatic; nootropic; neuroprotective; anti-HV; anticonvulsant; ophthalmological; antirheumatic; antiarthritic; antidiabetic; antipsoriatic; antinflammatory; cancer; eye disease; arterlosclerosis; anemia; acute myeloid leukaemia; Alzheimer's disease; AIDS; epilepsy; neurofibromatosis; rheumatoid arthritis; psoriasis; bowel disease;
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0; Mismatches 48; Indels
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                                                                                                                                                                                                                                                                                                                             ABL33712 standard; DNA; 13326 BP
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01-SEP-2000; 2000DE-1043826
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Matches 77; Conservative
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                                                                              1780 atcaa 1784
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The present invention provides a number of human immune system associated
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                                                                                                                                                                                                                                                                                    Human; immune system disease; cytosine methylation; antiasthmatic;
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neuroprotective; anti-HIV; anticonvulsant; ophthalmological;
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                                                                                                                                 ABL34154 standard; DNA; 15548 BP.
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1635 ctaaa 1639
                                   6572 CTAAA 6568
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                                                                                              RESULT
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The present invention provides a number of human immune system associated
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           macular degeneration, arteriosclerosis, anaemia, cancer, acute myeloid leukaemia, Alzheimer's disease, AlbS, epilepsy, neurofibromatosis, rheumatoid arthritis, psoriasis and inflammatory/ulcerative bowel diseases. The present sequence is a gene of the invention.
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                                                                                                                                                        Human; immune system disease; cytosine methylation; antiasthmatic; antianaemic; oytostatic; nootropic; nontianaemic; neuroprotective; anti-HTV; anticonvulsant; ophthalmologic; antirheumatic; antiarthritic; antidiabetic; antipsoriatic; antinflammatory; cancer; eye disease; arteriosclerosis; anemia; acute myeloid leukaemia; Alzheimer's disease; AlDS; epilopsy; neurofibromatosis; rheumatoid arthritis; psoriasis; bowel disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            for diagnosis and treatment of diseases associated with abnormal cytosine methylation
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1; SEQ ID NO 1458; 32pp + Sequence Listing; German.
                                                                                                                Human immune system associated gene SEQ ID NO: 1458.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      02-JUL-2001; 2001WO-EP07537.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-JUN-2000; 2000DE-1032529
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                                                                   26-MAR-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               166; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (EPIG-) EPIGENOMICS AG
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                                                                                                                                                                                                                                                                                                                                                                                                                         WO200200928-A2.
                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      03-JAN-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Olek A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                  dene;
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    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention provides a number of human metastasis associated genes which are modified by cytosine methylation. The sequences can be used in the diagnosis and treatment of cancer. The present sequence is one of the genes of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1464 attaagtcagattccaacagagttacatctcttaagaaataatgtaacccctttagactt 1523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8412 ATCAACTCCTTCATCAATAACTATACTTCTTTAAAAAATTAATTAACTCTCTCTATACTT 8353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New nucleic acid derived from chemically treated metastasis genes, useful for diagnosis of cancers by analysis of cytosine methylation,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ouery Match 2.4%; Score 48; DB 24; Length 18585; Best Local Similarity 57.2%; Pred. No. 0.11;
                                                                                                                                                                                                                                                                                                                                                                                                Metastasis associated gene; cytostatic; gene therapy; cancer; cytosine methylation; gene; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 18585 BP; 5806 A; 120 C; 3238 G; 9421 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            65; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 1; SEQ ID NO 162; 23pp + Sequence Listing; English.
                                               1667 tataatcaaataatcaatactcaactgaagtttgtgcagttaat 1710
                                                                                            2712 TATATATATATCCGTATATATATATATATATATTCCGTATAT 2669
                                                                                                                                                                                                                                                                                                                                                      Human metastasis associated gene SEQ ID NO: 162.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pred. No. 0.11
0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Berlin K;
                                                                                                                                                                                                               ABL34609 standard; DNA; 18585 BP
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01-SEP-2000; 2000DE-1043826.
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Olek A,

Berlin K;

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Indels

0; Mismatches 171;

1641 aaacttggtattgtgttta----cagaacctataatcaaataatcaatactcaactga 1694

ABL33485 standard; DNA; 13202 BP

RESULT 12 ABL33485/c ID ABL334

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Matches

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1614 aactatttgtatgtctcccctctaaataaacttggtattgtgtttacagaacctataatc 1673
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                                                                                                                                                                                                                                                                                                                                                                                                        Promoter activity; expression vector; ss.
                                                                                                                                                                                                                                                                                                                                                               Peroxidase isozyme gene fragment.
                                                                                     1674 aaataatcaatactcaactga 1694
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1; Page 1; 7pp; Japanese.
                                                                                                                                                                                                                                   BP.
                                                                                                                            176 CAATAATACAATCTCGACTCA 156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          90JP-0244779.
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nes 105; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Armoracia rusticana.
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                                                                                                                                                                                                               AAQ24835
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention provides a number of human immune system associated genes which are modified by the methylation of cytosines. The sequences can be used in the diagnosis and treatment of immune system disorders, including eye diseases such as retinopathy, neovascular glaucoma and macular degeneration, arteriosclerosis, anaemia, cancer, acute myeloid retwaemia, Alzhaimer's disease, Alls, epilepsy, neurofibromatosis, rheumatoid arthritis, psoriasis and inflammatory/ulcerative bowel diseases. The present sequence is a gene of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1494 ottaagaaataatgtaacccotttagactttatattttgcaattaaaaaaaatttaa 1553
    1174 AAATTTTATATAAATTAAAAATTCAAACTCTAAAATCAAACTATAAATACCAAACGTT 1115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nucleic acid comprising fragment of chemically modified gene, useful for diagnosis and treatment of diseases associated with abnormal cytosine methylation
                                                                                                                                                                                                                                                                                                                                                                             antiarteriosclerotic; antianaemic; cytostatic; nootropic; neuroprotective; anti-HIV; anticonvulsant; ophthalmological; antisheumatic; antiarthritic; antidiabetic; antipsoriatic; antiinflammatory; cancer; antiinflammatory; cancer; actions and a sease; arteriosclerosis; anaemia; acute myeloid leukaemia; Alzheimer's disease; AIDS; epilepsy; neurofibromatosis; rheumatoid arthritis; psoriasis; bowel disease;
                                                                                                                                                                                                                                                                                                                                                             immune system disease; cytosine methylation; antiasthmatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Match 2.3%; Score 47.4; DB 24; Length 16545; Local Similarity 52.2%; Pred. No. 0.15; es 105; Conservative 0; Mismatches 96; Indels 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 1; SEQ ID NO 23; 32pp + Sequence Listing; German.
                                          1695 agtttgtgcagttaattgaagggattaacggccaaaatgcact 1737
                                                                   Human immune system associated gene SEQ ID NO: 23.
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0; Mismatches
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                                                                                                                                                                                           ABL32050 standard; DNA; 16545 BP.
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01-SEP-2000; 2000DE-1043826.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          236 ATTITATTTTATTTTATTTTTTAAAACGATATATCACTCCTACTACCAAACTAAAATA 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        It is derived from the peroxidase isozyme gene and has strong promoter activity in plants and yeast. This sequence can be used in expression vectors for various kinds of foreign genes eg. betaglucuronidase, peroxidase, as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The sequence given is a DNA fragment which has promoter activity.
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0; Mismatches 78; Indels
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Horseradish peroxidase; isozyme; promoter activity; transgenic plant; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This sequence represents a DNA fragment of the horseradish peroxidase isozyme gene. The fragment has promoter activity. The invention relates to a DNA fragment derived from the horseradish peroxidase isozyme gene. The fragment can be inserted into a vector, which when expressed in a plant cell exhibits promoter activity. The promoter activity is at least 4 times higher than the cauliflower mosaic virus 35s promoter. An expression vector containing the DNA fragment can be used to transform plants and cause the expression of heterogenes.
                                                                                                                                                                                                                                                                                                                                                                                  A DNA fragment, from horseradish peroxidase isozyme gene, having promoter activity - useful in an expression vector which can express various heterogenes
                                                                                Horseradish peroxidase isozyme gene promoter fragment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 532 BP; 210 A; 71 C; 58 G; 193 T; 0 other;
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                                                                                                                                                                                                                                                    99JP-0196728.
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                                                (first entry)
                                                                                                                                                   Armoracia rusticana.
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                AAZ98840;
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Search completed: August 25, 2002, 17:21:01 Job time: 14769 sec us-09-645-593-8.rni

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2: /cgn2_6/ptodate/2/ina/5B_COMB.seq:*
3: /cgn2_6/ptodata/2/ina/6B_COMB.seq:*
4: /cgn2_6/ptodata/2/ina/FB_COMB.seq:*
5: /cgn2_6/ptodata/2/ina/PcTUS_COMB.seq:*
6: /cgn2_6/ptodata/2/ina/PcTUS_COMB.seq:*
GenCore version 4.5
Copyright (c) 1993 - 2000 Compugen Ltd.
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Listing first 45 summaries
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4999
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                                                                                                                                                                                                                                                                Title:
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

						COLUMNIC	
908	Apen1+		Onerc Sperc				
į	NO.	Score	Match	Match Length	DB	ID	Description
		129.6	2.6	3113	;	US-08-146-422-20	Sequence 20, Appl
	(7)		2.6	3113	Н	-08	7
	m	102.4	5.0	1685	, - 1	-08	1,
	4	101.2	2.0	1556	Н	US-08-486-721A-2	5,
O	ņ	68.8	1.4	7218	П	-08-232-463	Sequence 14, Appl
	9		1.2	7218	Н	.232-	14,
	7	47.4	6.0	1240	Н	US-08-142-393-2	á
	œ	45.4	6.0	1431	4	-316-083-	'n
O	σ	43.8	6.0	8920	7	-08-446	,
O	10	43.8	6.0	8920	4	-09-150-74	1,
U	11	43.4	6.0	5923	4	-064-92	3,
O	12	42.4	0.8	3319	7	-960-022-1	19, 1
	13		0.8	663	4	US-08-998-416-191	191
	14	42	0.8	854	4	-08-998-4	534,
	15	41.6	0.8	68750	m	332	1,
	16		8.0	68750	₹	01-895-60	ľ
	17	41.6	0.8	68750	4	09-567	7
	18	41.6	0.8	68750	4	09-268	1,
	13	41.6	0.8	68750	4	-568-48	Sequence 1, Appli
	20	41.6	0.8	68750	4	-568-47	1, AF
บ		41,4	0.8	662	4	-998-416-18	185
O		41.4	0	665	4	998-41	7,
ย		41.4	0	701	4	-416-	701,
O		41.4	0	711	4	-41	
O		41.4	0	724	4	-68	683,
U	56	41,4	0.8	732	4	-08-998-416-10	Sequence 1036, Ap
O		41.4		828	4	US-08-998-416-538	

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Sequence 17, Appl
Sequence 1137, Ap
Sequence 288, Appl
Sequence 1, Appli
Sequence 1, Appli
Sequence 2, Appli
Sequence 1, Appli
Sequence 1, Appli
Sequence 2, Appli
                                                                                                                                          Sequence 51, Appl
Sequence 52, Appl
Sequence 51, Appl
Sequence 52, Appl
Sequence 12, Appl
Sequence 2, Appli
Sequence 305, App
Sequence 287, App
Sequence 17, Appl
                                                                                                                                                                                                                                                                                2.6%; Score 129.6; DB 1; Length 3113; 55.0%; Pred. No. 2.8e-27;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/146,422
FILING DATE: 02-NOV-1993
CLASSIFICATION: 514
US-08-998-416-305
US-08-998-416-287
US-08-998-416-17
US-08-998-416-1137
US-08-998-416-1137
US-08-602-010A-2
US-08-602-010A-2
US-08-602-010A-2
US-08-680-726A-1
US-08-680-726A-1
US-08-680-726A-5
US-09-092-409-1
US-08-680-726A-51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: KENNEDY, BILL
REGISTRATION NUMBER: 33,407
REGISTRATION NUMBER: 44615-20011.23
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 813-5600
TELEPHONE: (415) 494-0792
                                                                                                                                                                                                                                           ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     E: MORRISON & FOERSTER
755 Page Mill Road
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX: (415) 494-0792
TELEX: 706141
INFORMATION FOR SEQ ID NO: 20: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 3113 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
   CITY: Palo Alto
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER: IBM PC
OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY: USA
ZIP: 94304-1018
     ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY:
                                                                                                                                                                                                                                                                  RESULT (1)
US-08-146-428-20
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3745 atgtcgtcaaggaggtgatcaacttgcttatgtaaaatgtgacggtgaaataataacggt 3804
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                                                                      2437 ICTCAGCCCTCCGTGGATCTATCCGTCAAAAGGGGATGGTGCTTCCAGTGGAACGCAA 2496
                                                                                                                                                                2557 ACGGTGACGAGGTGTTCGACGGACAAGTCTCTCAAGGACAGCTACTTTCCATACCACAAG 2616
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                                                                                                                                                                                                                                                                                                                                                                                                                                              2737 TAGAGGTCATATCCAATGGGTACCAAATCTCACTCGAAGAAGAAGAAGAGGGTTAAGTTCA 2796
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                                             3325 tatctgaccgaccggtttgaattttgtaggaagcgatcaggctgccgcactggaacatca 3384
                                                                                                                                       3385 acgcacacagcatagtgtacgcgatcagaggacaagccagagtccagatcgtgaacgagg 3444
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1; Gaps
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0; Mismatches 224; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2000 PENNSYLVANIA AVENUE NW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: VAN OOIJEN, ALBERT J.J.
APPLICANT: NEITYPELD, KRIJN
APPLICANT: HOEKEMA, ANDREAS
APPLICANT: PEN, JAN
APPLICANT: SIJMONS, PETER C.
APPLICANT: VERWOERD, TEINIS C.
APPLICANT: VERWOERD, TEINIS C.
APPLICANT: QUAX, WILHEMUS J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MORRISON & FOERSTER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-626-554-2
; Sequence 2, Application US/08626554
; Patent No. 5714474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:
NAME: MURASHIGE, KATE H.
REGISTRATION NUMBER: 29,959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2916 ATAAAAGAGTAATAAT 2935
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3805 aaaatatatgtaataataat 3824
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Matches 275; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WASHINGTON
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         USA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY:
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2857 AGGCTGATGCTTAAGAGCTTACCCAGTGAACCTCTACTGTAAAAG-GAAGTTAAATAGTA 2915
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2737 TAGAGGTCATATCCAATGGGTACCAAATCTCACTCGAAGAAGCAAGAAGAGGGTTAAGTTCA 2796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3685 acaggcaggagactcacttggctagcaccagggccagtccaggtcgcccgggaggttga 3744
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                                                                                                                                                                                                                                                                                                                                                                                                 ٠.
                                                                                                                                                                                                                                                                                                                                              Similarity 55.0%; Pred. No. 2.88-27; Similarity 55.0%; Pred. No. 2.88-27; Conservative 0; Mismatches 224; Indels 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES: 22
CORRESSONDENCE ADDRESS:
ADDRESSEE: Frishauf, Holtz, Goodman, Langer & Chick
STREET: 767 Third Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: FURAZZWA, Chikafusa
TITLE OF INVENTION: Method of Producing
TITLE OF INVENTION: Asparaginyl Endoprotease
REFERENCE/DOCKET NUMBER: 26192-20011.10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3+ inch, 1.4 mb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 1, Application US/08486721A
Patent No. 5739025
                TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 897-1500
TELEFAX: 90-4030 MRSNFOERSWSH
INFORMATION FOR SEQ ID NO: 2:
SEQUIENCE CHARACTERISTICS:
LENGTH: 3113 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3805 aaaatatatgtaataataat 3824
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                                                                                                                                                                          LENGTH: 3113 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                    275; Conservative
                                                                                                                                                                                                                             single
                                                                                                                                                                                                                                                  TOPOLOGY: linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-486-721A-1
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                                                                                                                                                                                                                                                                        US-08-626-554-2
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                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                 Best Local
                                                                                                                                                                                                                                                                                                                                                                                                       Matches
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1320 GTGAAGGATGCCAGTATATCTCAAGACCAACCCAAACTCCATCGTTAGCCACATCG 1379
                                                                     3532 gegagaggtttgagtgggtggegtteaagaceaaegaeaaegegatggtgaaetegetag 3591
                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES: 22
CORRESPONDENCE ADDRESS:
ADDRESSER: Frishauf, Holtz, Goodman, Langer & Chick
STREET: 767 Third Avenue
                                                                                                                                              APPLICANT: Fukazawa, Chikafusa
TITLE OF INVENTION: Method of Producing
TITLE OF INVENTION: Asparaginyl Endoprotease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY: USA
ZIP: 10017-2023
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3+ inch, 1.4 mb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/091,991
FILING DATE: 12-JULY 1993
ATTORNEY/AGENT INFORMATION:
NAME: BAITH, Richard S.
REGISTRATION NUMBER: 28.180
REFERENCE/DOCKET NUMBER: 930587/HG
TELECHONE: (212) 319-4900
TELECHAX: (212) 319-4900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OPERATING SACII
SOFTWARE: ASCII
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/486,721A
APPLICATION NUMBER: 1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    middle stage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FRAGMENT TYPE:
ORIGINAL SOURCE:
ORGANISM: Oat (Avena sativa, L.)
                                                                                                                                                                                                                                                                    Sequence 2, Application US/08486721A
Patent No. 5739025
GENERAL INFORMATION:
APPLICANT: FURAZAWA, Chikafusa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEX: 236268
INFORMATION FOR SEQ ID NO: 2
SEQUENCE CHARACTERISTICS:
LENGTH: 1556 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              nucleic acid
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LIBRARY: CDNA 1:1--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INDIVIDUAL ISOLATE: DEVELOPMENTAL STAGE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOLECULE TYPE: c-DNA HYPOTHETICAL:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM PC OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLONE: A1B
POSITION IN GENOME:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New York
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US-08-486-721A-2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: Oat 12S globulin / 11-5 protein Family LOCATION: protein bodies of cotyledonary tissue IDENTIFICATION METHOD:
                                      SOFTWARE: ASCII
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/486,721A
FILING DATE: 7-JUNE-1995
CLASSIFICATION: 435
                                                                                                                                                                                                                                       REFERENCE/DOCKET NUMBER: 930587/HG TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   middle stage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FRAGMENT TYPE:
ORIGINAL SOURCE:
ORGANISM: Oat (Avena sativa, L.)
                                                                                                                             PRIOR APPLICATION DATA:
APPLICATION WHERE: 08/091,991
FILING DATE: 12-JULY-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                   TELEFAX: 141.,
TELEX: 236268
INFORMATION FOR ENQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 1685 base pairs
TYPE: nucleic acid
TYPE: nucleic acid
                                                                                                                                                                                                      NAME: Barth, Richard S. REGISTRATION NUMBER: 28,180
                                                                                                                                                                                                                                                                        (212) 319-4900
(212) 319-5101
                         OPERATING SYSTEM: MS DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CDNA library
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PUBLICATION INFORMATION:
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IMMEDIATE SOURCE:
LIBRARY: cDNA library
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEVELOPMENTAL STAGE:
HAPLOTYPE: 2n
                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE: C-DNA
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         IBM PC
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POSITION IN GENOME:
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US-08-486-721A-1
         COMPUTER:
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                                                                                                                                                                                                                                                                                                                                                            DB 1; Length 1556;
                                                                                                                                                                                                                                                                                                                                                       Query Match 2.0%; Score 101.2; DB 1; Length 1 Best Local Similarity 56.2%; Pred. No. 3.5e-19; Matches 190; Conservative 0; Mismatches 148; Indels
                                                                                   NAME/KEY: Oat 12S globulin / 11-S protein family LOCATION: protein bodies of cotyledonary tissue IDENTIFICATION METHOD: OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPOTER READSABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3652 tgtcgccggaggaggcgaggagggtgaagttcaacagg 3689
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APPLICANT: SCHEIFLINGER, F.
APPLICANT: SCHEIFLINGER, F.
TITLE OF INVENTION: RECOMBINANT FOWLPOX VIRUS
CORRESPONDENCES: 52
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEE: Foley & Lardner: 1800 Diagonal Road, Suite 500 Alexandria
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/07/935,313
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US/08/232,463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 14, Application US/08232463 Patent No. 5670367 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION DATA
                                                                                                                                                                                         PUBLICATION INFORMATION: AUTHORS:
CHROMOSOME/SEGMENT: MAP POSITION:
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US-08-486-721A-2
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3560 gaccaacgacaacgcgatggtgaactcgctagccgggaggacatcggcagtaagggcgat 3619
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       1.4%; Score 68.8; DB 1; Length 7 ilarity 7.6%; Pred. No. 3.5e-09; Conservative 235; Mismatches 177; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
APPLICANT: DORNER, F.
APPLICANT: SCHEIFLINGER, F.
APPLICANT: FALKNER, F. G.
TITLE OF INVENTION: RECOMBINANT FOMLPOX VIRUS
NUMBER OF SEQUENCES: 52
                                                             NAME: BENT, Stephen A. REGISTRATION NUMBER: 29,768
REFERENCE/DOCKET NUMBER: 30472/114 IMMU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEE: Foley & Lardner: 1800 Diagonal Road, Suite 500 Alexandria
APPLICATION NUMBER: EP 91 114 300.6 FILING DATE: 26-AUG-1991 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3860 ggaaatgtgtaatgagccagtagccg 3885
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                                                                                                                         TELECOMMUNICATION INFORMATION:
TELEPHONE: (703)836-9300
TELEFAX: (703)683-4109
                                                                                                                                                                                TELERA: 899149
TELEX: 899149
INFORMATION FOR SEQ ID NO: 14
SEQUENCE CHARACTERISTICS:
LENGTH: 7218 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                       single
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                                                                                                                                                                                                                                                                                                                            ; TOPOLOGY: linear; IMMEDIATE SOURCE: CLONE: pTZqpt-Fls US-08-232-463-14
                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
Matches 34; Conserv?
                                                                                                                                                                                                                                                                                                  STRANDEDNESS:
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PC-DOS/MS-DOS
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Patent No. 6280942
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IBM PC compatible
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APPLICANT: Maruta, Yoshiyuki
TITLE OF INVENTION: Method for
TITLE OF INVENTION: Proteins
NUMBER OF SEQUENCES: 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (703)205-8000
(703)205-8050
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INFORMATION FOR SEQ ID NO: 2
SEQUENCE CHARACTERISTICS:
LENGTH: 1240 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Oryza sativa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            double
                                                                          CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                              COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          nucleic acid
                                                                                                                                                                                                                                                                  OPERATING SYSTEM:
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                                                                                                                                                                    U.S.A.
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                                                                                                                                                                                                                                                                                                                                            FILING DATE: 24 CLASSIFICATION:
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ORIGINAL SOURCE:
                                                                                                                                                                                                                          MEDIUM TYPE:
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                                                                                                                                  CITY: 1
STATE:
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Best Local Similarity 5.1%; Pred. No. 5.9e-07;
Matches 21; Conservative 228; Mismatches 161; Indels
                                                                                          OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PAREABLE NELEASE #1.0, Version #1.25
CURRAT APPLICATION DATA:
APPLICATION NUMBER: US/08/232,463
                                                                                                                                                                                                                                                                                                                      NAME: BENT, Stephen A. REGISTRATION NUMBER: 29,768
REFERENCE/DOCKET NUMBER: 30472/114 IMMU TELECOMMUNICATION INFORMATION: TELEFHONE: (703)836-9300
TELEFAX: (703)83-4109
                                                                                                                                                                                                                                                              APPLICATION NUMBER: EP 91 114 300.6 FILING DATE: 26-AUG-1991 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                            PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/07/935,313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 2, Application US/08142393; Patent No. 5516668; GENERAL INFORMATION:
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TELEFAX: (99149)
TELEFAX: 899149
INFORMATION FOR SEQ ID NO: 14:
SEQUENCE CHARACTERISTICS:
LENGTH: 7218 base pairs
TYPE: nucleic acid
                  ZIP: 22313-0299
COMPUTER REACABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
                                                                                                                                                                                      CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; CLONE: pTZgpt-Fls
US-08-232-463-14
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                                                                                                                                                                                                                                                FILING DATE:
                                                                                                                                                                        FILING DATE:
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2142 togacaggatogacgcatoogagooggacaaaaccatooaggoagaagotggoaccatog 2201
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2202 aggtatgggaccagaaccgccagcaattccagtgcgctggtgttgccgttgtaaggcgca 2261
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2262 ccattgagcccaaaggtettetettgeettetacagcaacacceteageteatetaca 2321
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0.9%; Score 47.4; DB 1; Length 1240;
Best Local Similarity 52.2%; Pred. No. 0.0017;
Matches 105; Conservative 0; Mismatches 96; Indels 0
Method for Decreasing Seed Storage
Proteins and for Transforming Plants
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: The Institute of Physical and Chemical Research
TITLE OF INVENTION: Endonuclease
FILE REFERENCE: PH-651
CURRENT APPLICATION NUMBER: US/09/316,083A
CURRENT FILING DATE: 1999-05-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: U$/08/142,393
FILING DATE: 24-NOV-1993
                                                                                                                                ADDRESSEE: Birch, Stewart, Kolasch & Birch
STREET: 8110 Gatehouse Road, Suite 500 East
CITY: Falls Church
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTORNEY/AGENT INFORMATION:
NAME: MUTDHY Jr., Gerald M.
REGISTRATION NUMBER: 28,977
REFERENCE/DOCKET NUMBER: 760-175P
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Gaps

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FILE REFERENCE:
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US-09-150-741-1/c
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                                        Query Match
                                                             Best Local
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                                                                                                                                                                                                                                                                                                                                                            1223 ttttacctttacatgataataacaatttaattatattaaatttagatttaatactttta 1282
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1635 ctaaataaacttggtattgtgtttacagaacctataatcaaataatcaatactca 1689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.9%; Score 45.4; DB 4; Length 1431; 53.7%; Pred. No. 0.0075;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Stewart, Thomas S
APPLICANT: Flores, Maria V
APPLICANT: O'Sullivan, William J
TITLE OF INVENTION: Uncleotide sequence encoding carbamoyl
TITLE OF INVENTION: phosphate synthetase II
NUMBER OF SEQUENCES: 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSEE: Nixon & Vanderhye PC
STREET: 1100 No. 5849573th Glebe Road, 8th Floor
                                                                                                                                                                                                                                                                                                                     0; Mismatches
EARLIER APPLICATION NUMBER: JP98/141861
EARLIER FILING DATE: 1998-05-22
NUMBER OF SEQ ID NOS: 38
SOFTWARE: Patentin Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: Patentin Release #1.24
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/446,855A
FILING DATE: 06-Jul-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IBM PC compatible
YSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTORNEY/AGENT INFORMATION:
NAME: Mitchard, Leonard C
REGISTRATION NUMBER: 29.009
REFERENCE/DOCKET NUMBER: 47-80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 1, Application US/08446855A Patent No. 5849573
                                                                                                                                        ORGANISM: Saccharomyces cerevisiae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELECOMMUNICATION INFORMATION:
TELEPHONE: 703-816-4000
TELEFAX: 703-816-4100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION FOR SEQ ID NO: 1;
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                                                                                                                                                                                                                                                                                                  Best Local Similarity 53.79
Matches 94; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY: USA
ZIF: 22201-4714
COMPUTER READABLE FORM:
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                                                                                                                                                                                                ; LOCATION: (1)..(1428)
US-09-316-083-2
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: USA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Arlington
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                                                                                                                                                                                 NAME/KEY: CDS
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                                                                            SEQ ID NO 2
LENGIH: 1431
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                                                                                                                       TYPE: DNA
                                                                                                                                                                                                                                                                                 Query Match
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4033 tetagitetigagaggatgaageateacegaacagtteigeaaciateeeteaaaageti 4092
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                                                                                                                                                                                                                         3973 taaaataateteeaateggaagaacaaeatteeatateeatggatgttteittaeeeaaa 4032
                                                                                                                                                                                                                                                                        8653 ATTTGTATATATAACAAAATTTATAAAAAATAAATCAATATAAATTAATGATGATGTTATT 8594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3973 taaaaataateteeaateggaagaacaacatteeatateeatggatgtttetttaeeeaaa 4032
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: Nucleotide Sequence Encoding Carbamoyl Phosphate Patent No. 6183996
TITLE OF INVENTION: Synthetase II
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       j;
0.9%; Score 43.8; DB 2; Length 8920; 50.2%; Pred. No. 0.087; tive 0; Mismatches 132; Indels 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 0.9%; Score 43.8; DB 4; Length 8920; Best Local Similarity 50.2%; Pred. No. 0.087; Matches 134; Conservative 0; Mismatches 132; Indels 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/09/150,741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT FILLING DATE: 1998-09-10
EARLIER APPLICATION NUMBER: PL6380
EARLIER FILING DATE: 1992-12-16
EARLIER APPLICATION NUMBER: 0493/00617
EARLIER FILING DATE: 1993-12-02
EARLIER FILING DATE: 1995-07-06
NUMBER OF SEQ ID NOS: 15
SOFTWARE: PATENTIN VET: 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4153 atactaatactatattattaattacta 4179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8533 ATATATATATATATATATATATA 8507
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; TYPE: DNA
; ORGANISM: Plasmodium falciparum
US-09-150-741-1
                                                          Matches 134; Conservative
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APPLICANT: Stewart et al
                                  Similarity
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RESULT
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                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: Callis, Judy
APPLICANT: Worley, Carthy K.
TITLE OF INVENTION: Sequences from Auxin-Induced Gene
TITLE OF INVENTION: Products Targeting Fusion Proteins for Degradation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1548 atttaacttttagactttatatatatgttttaataactaagtttaaccactctattattta 1607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1488 acatotottaaagaaataatgtaaccootttagactttatatatatttgcaattaaaaaaata 1547
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /notes "gene for PS-IAA6 (indoleacetic acid-inducible gene of pea (Pisum sativum))"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5280 AAACGCCAATATATAGTTACATAACTTTTAAACAACATGGTGTT 5236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCRATION: join(2667..3012, 4327..4420, 4778..4877)
OTHER INFORMATION: protein"
OTHER INFORMATION: protein"
OTHER INFORMATION: /note= "gene for PS-IAA6 (indolone)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/064,922
                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFLATION: COUNTY
ATTORNEY/AGENT INFORMATION:
NAME: Hyman, Laurence J.
REGISTRATION NUMBER: 35,551
REFERENCE/DOCKET NUMBER: 023070-085400US
TELEFAN: (415) 576-0200
TELEFAN: (415) 576-0200
TELEFAN: (415) 576-0300
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 5923 base pairs
TYPE: nucleic acid
STRANDEDNESS: Single
4153 atactaatactatattattaattacta 4179
                                          8533 ATATATATATATATATATATATATA 8507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IMBER: US/09/064,922
22-APR-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                   Sequence 3, Application US/09064922
Patent No. 6222095
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM: MEDIUM TYPE: Floppy (
                                                                                                                                                                                                                                                                                                                                                                                                CITY: San Francisco
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OTHER INFORMATION:
COTHER INFORMATION:
US-09-064-922-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                             Y: USA
94111-3834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 22 CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY: CDS
LOCATION: joir
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY: 11:
                                                                                                                                   US-09-064-922-3/c
                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                           STREET:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.8%; Score 42.4; DB 2; Length 3319; 52.9%; Pred. No. 0.11; tive 0; Mismatches 81; Indels 0.
                                                                                                                                                                              APPLICANT: Treacy, Maurice
APPLICANT: Spaulding, Vikki
APPLICANT: Agostino, Michael J.
TITLE OF INVENTION: ENCERTED PROTEINS AND POLYNUCLEOTIDES
TITLE OF INVENTION: BUCODING THEM
NUMBER OF SEQUENCES: 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
ADDRESSEE: Genetics Institute, Inc.
STREET: 87 CambridgePark Drive
CITX: Cambridge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US/08/960,022
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Patent No. 6239264
GENERL INFORMATION:
APPLICANT: Pohlmann, Rainer
                  Sequence 19, Application US/08960022
Patent No. 5976837
                                                                              Jacobs, Kenneth
MCCOY, John M.
LaVallie, Edward R.
Racie, Lisa A.
Merberg, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION:
NAME: Sprunger, Suzanne A.
REGISTRATION NUMBER: 41,323
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (617) 498-8284
(617) 876-5851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 3319 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
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Matches 91; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          514
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US-08-960-022-19
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                                                               GENERAL INFORMATION:
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CLASSIFICATION:
us-08-960-022-19/c
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US-08-998-416-191
                                                                                  APPLICANT:
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APPLICANT:
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                                                                               APPLICANT: Rebischung, Corinne
TITLE OF INVENTION: GENOMIC DNA SEQUENCES OF ASHBYA GOSSYPII
TITLE OF INVENTION: AND USES THEREOF
NUMBER OF SEQUENCES: 1152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match

0.8%; Score 42.2; DB 4; Length 663;
Best Local Similarity 49.4%; Pred. No. 0.037;
Matches 132; Conservative 2; Mismatches 130; Indels
                                                                                                                                                                                                                                                                                                               COMPOTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PF/5-30306/A/CGC1976
                                                                                                                                                                                    SEE: No. 6239264artis Corporation : 3054 Cornwallis Road research Triangle Park No. 6239264th Carolina
                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION DATA:
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/998,416
FILING DATE: 24-DEC-1997
CLASSIFFICATION: 435
PROR APPLICATION DATA:
APPLICATION NUMBER: CH 0016/97
FILING DATE: 31-DEC-1996
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1620 ttgtatgtctcccctctaaataaactt 1646
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Steiner, Sabine
Mohr, Christine
Wendland, Jurgen
Knechtle, Philipp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: Meigs, J. Timothy
REGISTRATION NUMBER: 38,241
REFERENCE/DOCKET NUMBER: PF,
TELECOMMUNICATION INFORMATION:
TELEPHONE: 919-541-8587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX: 919-541-8689
INFORMATION FOR SEQ ID NO: 191:
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MOLECULE TYPE: DNA (genomic)
ORIGINAL SOURCE:
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TYPE: nucleic acid
STRANDEDNESS: single
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US-08-998-416-191
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                  APPLICANT:
APPLICANT:
  APPLICANT:
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US-08-998-416-534

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1440 ctggaaaccagagtgatgagacggattaagtcagattccaacagagttacatctctaag 1499
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TITLE OF INVENTION: GENOMIC DNA SEQUENCES OF ASHBYA GOSSYPII
TITLE OF INVENTION: AND USES THEREOF
UNDER OF SEQUENCES: 1152
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 0.8%; Score 42; DB 4; Length 854; Best Local Similarity 48.7%; Pred. No. 0.051; Matches 145; Conservative 0; Mismatches 150; Indels
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APPLICATION NUMBER: US/08/998,416 FILING DATE: US/08/998,416 FILING DATE: US/08/997
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: C 0016/97
FILING DATE: 31-DEC-1996
ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE: No. 6239264artis Corporation STREET: 3054 Cornwallis Road CITY: Research Triangle Park STATE: No. 6239264th Carolina COUNTRY: USA
Sequence 534, Application US/08998416
Patent No. 6239264
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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REGISTRATION NUMBER: 38,241
REFERENCE/DOCKET NUMBER: PF,
TELECOMMUNICATION INFORMATION:
TELEPHONE: 919-541-8587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             534:
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                                                                                                                                                                   APPLICANT: Mohr, Christine
APPLICANT: Wendland, Jurgen
APPLICANT: Knechtle, Philipp
                                                                                     Philippsen, Peter
Pohlmann, Rainer
Steiner, Sabine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 854 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
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MOLECULE TYPE: DI
ORIGINAL SOURCE:
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APPLICANT:
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24004 tgicicgcacgcgitccacicgccgctgaiggaaccgaigciggaggaggagtcgggcgggi 24063
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                                                                                                  APPLICANT: Schupe, Thomas
APPLICANT: Ligon, James
APPLICANT: Ligon, James
APPLICANT: Ligon, James
APPLICANT: Zirkle, Ross
APPLICANT: Zirkle, Ross
APPLICANT: Gorlach, Joern
TITLE OF INVENTION: GENES FOR THE BIOSYNTHESIS OF EPOTHILONES
FILE REFERENCE: 430562A
CURRENT APPLICATION NUMBER: US/09/335,409
CURRENT FILING DATE: 1999-06-17
NUMBER OF SEQ ID NOS: 30
SOFTWARE: Patentin Ver. 2.0
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                                     Sequence 1, Application US/09335409
Patent No. 6121029
GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                     ; TYPE: DNA
; ORGANISM: Sorangium cellulosum
US-09-335-409-1
                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 68750
RESULT 15
US-09-335-409-1
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